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Date: March 12, 2008 Name: Gustavo Siller, Jr. (Reg. No. 32,305) Signature: /Gustavo Siller, Jr./

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. of: Yukio Ohtaki et al.

Appln. No.: 10/654,732

Filed: September 4, 2003

For: OFDM RECEIVER FOR EASILY
SYNCHRONIZING BASE BAND
SIGNAL

Attorney Docket No: 9281/4649

Examiner: Jean B. Corrielus

Art Unit: 2611

Confirmation No.: 7366

RECORD OF INTERVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Record is made of the telephone interview between the Examiner, Jean B. Corrielus, and Applicants' attorney, Gustavo Siller Jr., on December 7 2007.

During the interview, Applicants' attorney agreed to amend the claims as set forth in the attached Revised Proposed Amendment for submission as Examiner's Amendment.

March 12, 2008

Respectfully submitted,

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Revised Proposed Claims for submission as Examiner's Amendment

Amendments to the Claims:

1. (Currently Amended) An orthogonal frequency division multiplexing (OFDM) receiver comprising:

at least four antennas to receive an OFDM modulated high frequency signal;

a plurality of OFDM demodulators ~~[[to]] each of which a~~ configured to receive a respective time domain ~~baseband signal of a time domain thereto generated based on the high frequency signal is input and from each of which a~~ and to output a respective frequency domain ~~baseband signal of a frequency domain is output~~, wherein each OFDM demodulator is coupled to a respective antenna group, each antenna group containing at least two of the at least four antennas;

a first phase shifter for each antenna group each having a first input coupled to the ~~[[a]]~~ second antenna of each antenna group, an output of ~~[[the]]~~ each first phase shifter and an output of ~~[[a]]~~ the first antenna of each antenna group being combined in a respective one of a plurality of first adders ~~adder~~ to provide the respective time domain baseband signal to each of the OFDM demodulators;

a first control circuit for each antenna group each coupled to an output of the respective one of the plurality of first adders ~~adder~~ and to a second input of each first phase shifter;

a second phase shifter having a first input coupled to an output of a second OFDM demodulator that is different from a first OFDM demodulator among the OFDM demodulators;[[,]]

a second control circuit coupled to an output of the plurality of OFDM demodulators and to a second input of the second phase shifter;

a second adder coupled to an output of the second phase shifter and an output of the ~~second~~ first OFDM demodulator, wherein

a signal is diversity-synthesized by the first phase ~~shifters~~ shifter until the respective time domain baseband signal ~~of the time domain~~ is inputted to each of the OFDM demodulators, and the frequency domain baseband signal output by the second OFDM demodulator ~~of the frequency domain~~ is diversity-synthesized by the second phase shifter.

2. (Currently Amended) The OFDM receiver according to claim 1, wherein the time domain baseband signal generated based on the high frequency signal ~~of the time domain based on the high frequency signal~~ received by the second ~~a first antenna in each of the antenna groups, and the baseband signal of the time domain based on the high frequency signal received by a second antenna different from the first antenna are~~ is diversity-synthesized by the first phase shifter of said antenna group.

3. (Currently Amended) The OFDM receiver according to claim 2, wherein each antenna in each antenna group is coupled to a respective one of a

plurality of receiving portions ~~portion~~ each configured to ~~[[that]]~~ frequency-convert converts the high frequency signal to ~~[[an]]~~ a respective intermediate frequency signal and a plurality of A/D converters each coupled to a respective one of the plurality of receiving portions for converting ~~an A/D converter that converts the~~ respective intermediate frequency signal to a respective digital signal is-coupled to each of the receiving portions, wherein an output of the digital signal output by the ~~a second~~ A/D converter corresponding to the second antenna of each antenna group is coupled to the first phase shifter of said antenna group and an output of ~~a first~~ the digital signal output by the A/D converter corresponding to the first antenna of each antenna group is coupled to the first adder of said antenna group.

4. (Currently Amended) The OFDM receiver according to claim 1, wherein an intermediate frequency signal generated based on the high frequency signal received by the second ~~a first~~ antenna in each of the antenna groups and an intermediate frequency signal ~~based on the high frequency signal received by~~ a second antenna different from the first antenna are is diversity-synthesized by the first phase shifter of said antenna group.

5. (Currently Amended) The OFDM receiver according to claim 4, wherein each antenna in each antenna group is coupled to a respective one of a plurality of receiving portions ~~portion~~ each configured to ~~[[that]]~~ frequency-convert converts the high frequency signal to ~~[[the]]~~ a respective intermediate frequency

signal, and an output the intermediate frequency signal of a first one of the receiving portions corresponding to the first antenna of each antenna group is coupled to the first adder of said antenna group and an output the intermediate frequency signal of a second one of the receiving portions corresponding to the second antenna of each antenna group is coupled to the first phase shifter of said antenna group.

6. (Currently Amended) The OFDM receiver according to claim 1, wherein the high frequency signal received by a first antenna in each of the antenna groups, ~~and the high frequency signal received by a second antenna different from the first antenna are~~ is diversity-synthesized by the first phase shifter of said antenna group.

7. (Cancelled)

8. (Currently Amended) The OFDM receiver according to claim 3, further wherein each of the first control circuits comprising power detector to detect electric power of the time domain baseband signal ~~of the time domain~~ and a phase controller to control phase setting of each respective one of said the first phase ~~shifters~~ shifter to maximize the electric power.

9. (Currently Amended) The OFDM receiver according to claim 5, further wherein each of the first control circuits comprising a power detector to

detect electric power of the time domain baseband signal ~~of the time domain~~ and a phase controller to control phase setting of each respective one of said the of the first phase shifters ~~shifter~~ to maximize the electric power.

10. (Currently Amended) The OFDM receiver according to claim 6, ~~further wherein each of the first control circuits~~ comprising a power detector to detect electric power of the time domain baseband signal ~~of the time domain~~, and a phase controller to control phase setting of each respective one of said the first phase shifters ~~shifter~~ to maximize the electric power.

11-12. (Cancelled)